IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of C. Lin-Hendel	Group Art Unit: 2174
Serial No. 09/544,036	Examiner: Gary D. Nguyen
Filed: April 6, 2000	Date: September 30, 2004
For: DYNAMIC ARRAY PRESENTATION AND MULTIPLE SELECTION OF DIGITALLY STORED OBJECTS AND CORRESPONDING LINK TOKENS FOR SIMULTANEOUS PRESENTATION	

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL DECLARATION UNDER 37 C.F.R. 1.131

1. I am Catherine Lin-Hendel Ph.D., the Inventor and the Declarant herein. All statements made herein are made from my own personal knowledge and submitted evidence. This Declaration supplements the Declaration Under 37 C.F.R. 2.131 previously submitted in connection with this application.

2. In this country, I conceived the basic concept of the subject matter of the above-identified invention in January 1996. From January to March of 1996 I was able to put together a variety of mock-up data and programs in the same computer to demonstrate the basic premise of the concept. To implement the concept over a computer networks and across the Internet, where data formats and standards could be very different from computer to computer, from network to network, and from website to website, extensive data recognition, data parsing, processing, reformatting, and

utility programs, some of which, though under development in computer network and infrastructure software companies (such as IBM, Sun Microsystems, and Microsoft) was not available during 1996 through 1999. It was generally recognized during 1997 that industry standard across the web on data/object access protocol (Standard on Object Access Protocol—SOAP) was the only way to facilitate reliable data gathering re-processing and re-presentation across the web. IBM took upon itself to coordinate the development of SOAP, the standards and utilities. The first SOAP 1.0 was available for beta trial early 1999, which enabled the implementation of my invention across the Internet, and computer networks in general, instead of on a single computer.

3. On April 19, 1999, I filed Provisional U.S. Patent Application Serial Number 60/130,397 for this invention.

4. From January 1996 until April 19, 1999 I diligently worked on implementing this invention. Specifically, during this period of time I wrote, tested and debugged the computer code required to implement the invention. Debugging the code included time spent thinking about and researching how to solve the problems, i.e., eliminating bugs encountered during the implementation process. Enclosed is a diskette containing files of notes made during the years 1996-1998, 1996-1999 and 1997-1998 evidencing my diligence in implementing this invention as well as a print-out of an attempt to program scrolling of a row of thumbnails—signified as rectangular boxes. The content of the thumbnails was fed into the program in real time from a single or multiple data sources.

EVIDENCE

Exhibit 1 is a print out of notes I made during the implementation of this invention during the years 1996-1999. These notes show the variety of tasks that were required of me to implement the invention.

Exhibit 2 is a print out of notes I made during the implementation of this invention during the years 1997-1998. These notes show the variety of tasks that were required of me to implement the invention.

Exhibit 3 is the result of an attempt to program scrolling of a row of thumbnails—signified as rectangular boxes. The content of the thumbnails was fed into the program in real time from a single or multiple data sources.

Exhibit 4 is the SOAP (Standard on Object Access Protocol) version time table from the SOAP community website.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18, of the United States Code, and that such false statements may jeopardize the validity of this Declaration, or any patent to which this verified statement is directed.

Catherine Lin-Hendel PhD.

Dated: September 30, 2004
Los Gatos, California

EXHIBIT 1

Multiple Select Notes 1996-1999.doc: Created Sep 30 1996, Last Modified Mar 10 1999
Catherine G. Lin-Hendel

Multiple Select Conceptual and Implementation Notes 1996-1999:

September 30, 1996

1. It has been pain in the neck coding all data paths and file name into my Multi-Select demo. I used some rug photographs to compose a catalog graphical thumbnails folder, a detailed graphics folder, and mock-up descriptions into another linked text folder, and mock up auction files for each rug. I was able to show the thumbnails in a graphical array, and java scripted a primitive multi-select function, and submit function to fetch all data regarding the number of selected rug-thumbnails at once, and display at once for comparison conveniences. It was so much work, I only coded the first two rows of rugs into the java script. The selection of other rugs beyond the first two rows would not work in a demo.

January 24, 1997:

1. In my September 1996 rug-demo implementation, access path and file names of catalogs and items must be hand coded into the functional scripting file, which makes implementation extremely labor intensive and cost prohibitive. The 1996 method is not practical when attempting to select object links from random sources/catalogs/web-pages on the Internet yet unknown to the service provider of this function.
2. In the 1996 demo script, I only coded the first two rows of rugs shown in the catalog page. I had not the time to encode paths to data relating to the other rugs in the remaining rows in the catalog page in the functional scripting file—rugmulti.js. Thus, these other rows of rugs would not respond to selection using the 1996 version. I need more time to figure out how to work this in a more elegant and labor economic way.

April 12, 1997

3. In order to have the implementation cost within practical realm, I need to explore method to dynamically fetch all data-paths of all link-tokens contained in a data page, in real-time, as the page is accessed by a user. The data-paths thus fetched would need to be piped into a database constituted in real time, and accessible to the Multi-Select functional scrip. The Multi-Select functional script must then be able to connect to this database dynamically, also in real time, as the user select each item/link.

July 5, 1997:

Since I have not done hands on work on databases for a long time, this work will require extensive study on databases and their present day advances. I have been frustrated by not having enough time to do the database study I need to do. Perhaps this will require me to hire someone who is professionally proficient in this area.

September 20, 1997:

Multiple Select Notes 1996-1999.doc: Created Sep 30 1996, Last Modified Mar 10 1999
Catherine G. Lin-Hendel

Spoke to several possible consultant/employee candidates. Their skill-set and the pay demand are out of whack. I suspect most of them don't even know about dynamic database as much as the little bit I do know. At the mean time, I need to keep studying and plugging at it.

January 15, 1998:

I think some common industry standard on inter-website data path specifications and communications protocol needs to be developed. Or, how else is error-free, real time, dynamic fetching of catalogues, data-paths, and data themselves, between random and different websites owned by different people and different companies possible?

March 18, 1998:

A good way to show multiple catalogues simultaneously would be to have several rows (or column) displayed independently on a display terminal screen, each row (or column) representing an individual catalog, or a category or sub-category of things/merchandize. Each catalog's (or category's) pictorial thumbnail representations of its content are then auto-scrolled through the display screen at a desired (and user adjustable) speed. User controllable buttons can be implemented to change speed, roll left, roll right, jump through (x-number of items, or x-number of screens), as well as changing the catalog (or category) displayed on the row (or column). Selection function can be implemented via many ways, for example, by clicking (and/or double clicking) on a picture-thumbnail. Single click can, for example, command bringing forth related information regarding the clicked item for viewing on the display screen; and double-clicking can command depositing the item and its related information into a folder for later batch comparison-shopping or batch ordering. These are functions that are extremely useful, but not obvious to me at this point as to how to implement them.

May 14, 1998:

Tried Java Script to code a single row scrolling picture thumbnails. Also coded: 1) moving the cursor onto a particular thumbnail to cause the scrolling to stop, and 2) single clicking on the particular thumbnail to command fetching related data and display the data on the computer display, 3) double clicking on the thumbnail to command the creation of a temporary "SAVE" file, and depositing the entire data relating to the thumbnail to the file.

July 15, 1998:

Problems:

1. the scrolling (of the picture thumbnails) is jumpy. Need to work on how to make the scrolling smooth.
2. Moving the cursor on top of a particular thumbnail to cause scrolling to stop, is not working.

4. The clicking/select function is too sensitive, and the differentiation between single-click and double-click is not accurate. At times the double-click is perceived as a single-click, therefore unable to "select." I believe the program is reacting immediately when the first click is detected, therefore fail to detect the 2nd click. I need to figure out how to program a proper "wait period" for the computer I/O to allow time to determine whether the click is a single click or a double click before making response prematurely, or failing to react to a single click.

August 24, 1998:

1. Have struggled to program multiple rows (columns) displaying independently and simultaneously on the display screen. Needs a professional programmer!!

October 2, 1998:

1. Can now display 3 rows, all scrolling at the same speed. Next step is to parse the rows, and implement independent scrolling control, while keeping the Multi-Select function integrated. Meaning, when selecting multiple items from different rows, which represent different categories and/or different catalogs, the selected item identifiers are all deposited into the same temp file for later processing when the completed selections are submitted.

2. Need to think about what are the optimal user controllable functions and buttons that should be installed/implemented on the display screen for the scrolling, viewing, speed, stop, changing of categories, fetch more info, and selecting functions.

November 15, 1998:

1. Have the functional buttons figured out and specified. Seem good, am satisfied. Need to research how to implement. Oh, an un-Godly amount of reading I must do! Wish I could read and learn faster.

January 20, 1999:

The Thanksgiving and Xmas trips took a toll on my own personal and private Multi-Select project! Am back plugging on it. Feels good.

February 25, 1999:

1. Have two rows now with "Left," "Right" "Faster," "Slower," and "Stop" scrolling control buttons, and the "hidden" category tree for changing category displayed on each row. The buttons work satisfactorily and independently.

2. Have problem with recovering the display underneath, when it is overlaid by the "detail" content pulled out for an item when the thumbnail was single-clicked. When the "detail" window is closed off, the rows of thumbnails should still be displayed, and the scrolling continued.
3. When an item on a row is either double clicked or single clicked, the images in other rows shake. This should not happen.

March 10, 1999:

I think, minus some bugs, I can demonstrate various aspects of the Multi-Select invention as real and useful well enough to merit going through the expense of filing patents.

EXHIBIT 2

Multiple Select Notes 1997-1998.doc; Created Jan 24 1997, Last Modified Mar 18 1998
Catherine G. Lin-Hendel

Multiple Select Conceptual and Implementation Notes 1997-:

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1. In my September 1996 rug-demo implementation, access path and file names of catalogs and items must be hand coded into the functional scripting file, which makes implementation extremely labor intensive and cost prohibitive. The 1996 method is not practical when attempting to select object links from random sources/catalogs/web-pages on the Internet yet unknown to the service provider of this function.
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Multiple Select Notes 1997-1998.doc; Created Jan 24 1997, Last Modified Mar 18 1998
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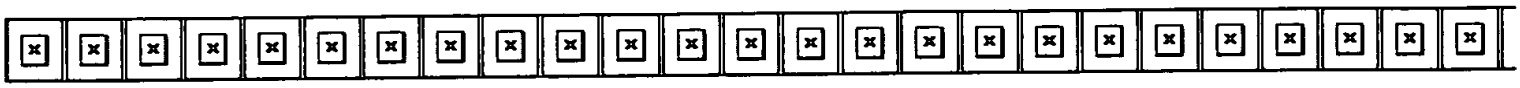

EXHIBIT 4

Do not link to this page - Use dated versions of the documents

Latest SOAP versions

This page (http://www.w3.org/TR/soap) contains links to the SOAP/1.1 Note and the SOAP Version 1.2 Recommendation documents.

For information about the latest work on SOAP and a full list of SOAP specifications , please refer to the W3C XML Protocol Working Group and the list of W3C Technical Reports.

SOAP Version 1.2

Latest version of SOAP Version 1.2 specification: http://www.w3.org/TR/soap12

W3C Recommendation 24 June 2003

SOAP Version 1.2 Part0: Primer
http://www.w3.org/TR/2003/REC-soap12-part0-20030624/
SOAP Version 1.2 Part1: Messaging Framework
http://www.w3.org/TR/2003/REC-soap12-part1-20030624/
SOAP Version 1.2 Part2: Adjuncts
http://www.w3.org/TR/2003/REC-soap12-part2-20030624/
SOAP Version 1.2 Specification Assertions and Test Collection
http://www.w3.org/TR/2003/REC-soap12-testcollection-20030624/

Please refer to the errata for these documents, which may include some normative corrections.

This document is a Recommendation of the W3C. This document has been produced by the XML Protocol Working Group, which is part of the Web Services Activity. It has been reviewed by W3C Members and other interested parties, and has been endorsed by the Director as a W3C Recommendation. It is a stable document and may be used as reference material or cited as a normative reference from another document. W3C's role in making the Recommendation is to draw attention to the specification and to promote its widespread deployment. This enhances the functionality and interoperability of the Web.

Simple Object Access Protocol (SOAP) 1.1

W3C Note 08 May 2000

SOAP/1.1 Note

http://www.w3.org/TR/2000/NOTE-SOAP-20000508/

This document is the submission to the World Wide Web Consortium (see Submission Request, W3C Staff Comment) and preceded the formation of a working group in the area of XML-based protocols.

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